

IN THE CLAIMS:

The following listing of claims replaces all prior versions:

1. (Previously presented) Apparatus for producing continuously molded bodies from a molding material, such as a spinning solution containing cellulose, water and tertiary amine oxide, comprising a multitude of extrusion orifices through which during operation the molding material can be extruded into continuously molded bodies, a precipitation bath and an air gap arranged between the extrusion orifices and the precipitation bath, the continuously molded bodies being passed during operation in successive order through the air gap and the precipitation bath, and a gas stream being directed in the area of the air gap to the continuously molded bodies, wherein the air gap directly after extrusion comprises a shielding zone and a cooling area separated from the extrusion orifices by the shielding zone, the cooling area being defined by the gas stream designed as the cooling gas stream.
2. (Previously presented) The apparatus according to claim 1, wherein in addition the first shielding zone, the air gap comprises a second shielding zone by which the cooling area is separated from the precipitation bath surface.
3. (Previously presented) The apparatus according to claim 1, wherein the width in the direction of passage of the shielding zone is dimensioned such that the shielding zone in the direction of passage extends at least over an expansion zone of the continuously molded bodies which directly follows extrusion and extends in the direction of passage.
4. (Previously presented) The apparatus according to claim 1, wherein the extrusion orifices are arranged on a substantially rectangular base are in rows in a direction transverse to the direction of the cooling gas stream.
5. (Previously presented) The apparatus according to claim 4, wherein the number of the extrusion orifices in row direction is greater than in the cooling gas stream direction.

6. (Previously presented) The apparatus according to claim 1, wherein the precipitation bath has disposed therein a deflector by which during operation the continuously molded bodies are deflected as a substantially planar curtain to the precipitation bath surface, and that outside of the precipitation bath there is provided a bundling means by which during operation the continuously molded bodies are united to form a fiber bundle.

7. (Previously presented) The apparatus according to claim 1, wherein the width (D) of the cooling gas stream in a direction transverse to the direction of passage of the continuously molded bodies through the air gap is larger than the height (B) of the cooling gas stream in the direction of passage.

8. (Previously presented) The apparatus according to claim 1, wherein the cooling gas stream is composed of a plurality of individual cooling gas streams.

9. (Previously presented) The apparatus according to claim 8, wherein the individual cooling gas streams are arranged side by side in row direction.

10. (Previously presented) The apparatus according to claim 1, wherein the cooling gas stream is designed as a turbulent gas flow in the area where the continuously molded bodies are passed through the air gap.

11. (Previously presented) The apparatus according to claim 1, wherein the cooling gas stream has a velocity component oriented into the direction of passage.

12. (Previously presented) The apparatus according to claim 1, wherein the inclination (β) of the cooling gas stream in the direction of passage is greater than the expansion (γ) of the cooling gas stream.

13. (Previously presented) The apparatus according to claim 1, wherein the molding material prior to its extrusion has a zero shear viscosity of at least 10000 Pas, at 85°C.

14. (Previously presented) The apparatus according to claim 1, wherein the distance of the cooling area from each extrusion orifice in the direction of passage is at least 10 mm each time.

15. (Previously presented) The apparatus according to claim 1, wherein the distance I of the cooling area in the direction of passage from each extrusion orifice in millimeters satisfies the following inequality:

$$I > H + A \cdot [\tan(\beta) - 0.14]$$

where H is the distance of the upper edge of the cooling gas stream in the direction of passage from the plane of the extrusion orifices at the exit from the blowing means in millimeters, A is the distance in a direction transverse to the direction of passage between the exit of the cooling gas stream of the blowing means in millimeters and the row of the continuously molded bodies that is the last one in flow direction, in millimeters, and β is the angle in degrees between the cooling gas stream direction and the direction transverse to the direction of passage.

16. (Previously presented) The apparatus according to claim 1, wherein the height L of the air gap in the direction of passage in millimeters satisfies the following inequality:

$$L > I + 0.28 \bullet A + B$$

where I is the distance of the cooling area from the extrusion orifices in the area where the continuously molded bodies are passed through the air gap, A is the distance in a direction transverse to the direction of passage between the exit of the cooling gas stream from the blowing means and the row of the continuously molded bodies that is the last one in flow direction, in millimeters, and B is the height of the cooling gas stream in a direction transverse to the cooling gas stream direction in the direction of passage at the exit of the cooling gas stream from the blowing means.

17. (Previously presented) The apparatus according to claim 1, wherein the first shielding zone consists essentially of air.

18. (Previously presented) A method for producing continuously molded bodies from a molding material, such as a spinning solution containing water, cellulose and tertiary amine oxide, the molding material being first extruded to obtain continuously molded bodies, the continuously molded bodies being then passed through an air gap and stretched in said air gap and blown at with a gas stream, and the continuously molded bodies being then guided through a precipitation bath, wherein the continuously molded bodies in the air gap are first passed through a shielding zone and then through a cooling area, the blowing operation being performed in the cooling area by means of the gas stream designed as the cooling gas stream.

19. (Previously presented) The method according to claim 18, wherein the continuously molded bodies after the cooling area are passed through a second shielding zone before they immerse into the precipitation bath.

20. (Previously presented) The method according to claim 18, wherein the velocity of the cooling gas stream, w_0 , in dependence upon its width B, is set in the direction of passage

of the continuously molded bodies by the air gap such that the Reynolds number formed with w_0 and B is at least 2500.

21. (Previously presented) The method according to claim 18, wherein the specific blowing power of the cooling gas stream is set to a value of at least 5 mN/mm.

22. (New) A method for reducing the surface tackiness of a molding material, comprising:

- (a) extruding the molding material to obtain continuously molded bodies;
- (b) stretching the continuously molded bodies through an air gap, the air gap comprising a shielding zone and a cooling area, wherein the continuously molded bodies are blown at with a cooling gas stream in the cooling area, thereby reducing the surface tackiness of the molding material;
- (c) guiding the continuously molded bodies through a precipitation bath.